



## TARRYTOWN-ON-HUDSON

One Depot Plaza, Tarrytown, New York 10591-3199

*Mayor*

DREW FIXELL

*Deputy Mayor*

THOMAS T. BASHER

*Trustees*

THOMAS BUTLER

ROBERT HOYT

MARY McGEE

REBECCA McGOVERN

DOUGLAS ZOLLO

*VILLAGE ADMINISTRATOR*

914-631-1885

*VILLAGE TREASURER*

914-631-7873

*VILLAGE CLERK*

914-631-1652

*VILLAGE ENGINEER*

914-631-3668

*DEPT. OF PUBLIC WORKS*

914-631-0356

FAX NO. 914-631-1571

January 28, 2014

Mr. Zaw Thein  
Assistant Engineer  
Bureau of Environmental Quality  
Westchester County Department of Health  
145 Huguenot Street, 8<sup>th</sup> Floor  
New Rochelle, NY 10801

SM

RE: Lead and Copper Rule Compliance Report – 2013  
Village of Tarrytown, New York

Dear Mr. Thein:

Attached please find laboratory results and summary tables for the lead and copper samples taken for the year 2013 by the Village of Tarrytown in accordance with the New York State sanitary code subpart 5-1.

As you are aware, samples were collected at thirty (30) locations during the months of June and August of 2013, and were analyzed for lead and copper by EnviroTest Laboratories, Inc. Accordingly, enclosed please find the following documents:

1. Signed Lead and Copper Rule Monitoring Report
2. 90<sup>th</sup> Percentile Tables for Lead and Copper
3. Lead and Copper Laboratory Test Results for the 30 site locations
4. Lead and Copper Results for Confirmation Sample at [REDACTED]
5. Past Test Results Table for [REDACTED]
6. Biweekly Water Quality Parameters (WQP) at the point of Entry

The attached table shows complete compliance with the copper results, while 4 of the 30 samples exceed compliance limit for lead. The failure in lead compliance does not make sense based on past results and distribution system improvements; as such a confirmation sample was obtained at [REDACTED] Site which resulted in compliance

Uses Recycled Paper

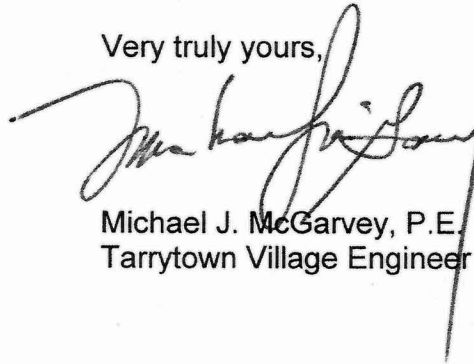
Exemption 6

Please be advised that Tarrytown has undertaken several water improvement projects in the last three years including replacement of approximately 5,000 linear feet water mains, cleaning and lining of approximately 15,000 linear feet of existing water mains, installation of new service connections, valves and hydrants. There has not been any change in the corrosion inhibitor treatment at the plant. We have compiled the past test results for the [REDACTED] site location for your review.

Based on the above, we believe that the failure during the first sample collection at the [REDACTED] site was an error, and based on the confirmation sample result, as described above, the Village meets the lead and copper compliance for the 2013 monitoring period. We request the Department to allow the Village to continue their lead and copper monitoring under the reduced schedule.

Should you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,



Michael J. McGarvey, P.E.  
Tarrytown Village Engineer

MJM:dsb  
Enclosure

cc: Michael Blau, Village Administrator  
Stephen Cowles, Shaft #10 Pump Station, Tarrytown (w/ attachments)  
Arshad Jalil, P.E., Principal, Professional Consulting, LLC (w/ attachments)  
Howard Wessells, Superintendent of Public Works, Tarrytown (w/ attachments)



Octagon 10 Office Center  
1719 Route 10, Suite 314  
Parsippany, New Jersey 07054

**Professional Consulting, llc.**

Phone: 973.683.0044  
Fax: 973.683.0077

January 15, 2014

Michael J. McGarvey, P.E.,  
Village Engineer  
Village of Tarrytown  
One Depot Plaza  
Tarrytown, NY 10591

RE: Lead & Copper Rule Compliance Report – 2013  
Village of Tarrytown, NY  
PCI No. 156-1

Dear Mike:

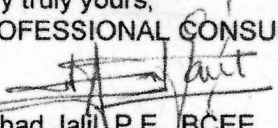
As per our meeting of January 15, 2014, enclosed please find the lead and copper sampling test results for the year-2013 for your review and submission to the Health Department. As you are aware the lead samples results did not meet compliance, and exceeded the action level at 4 of the 30 sampling sites. We understand that the failure at [REDACTED] is due to possible error in sampling/testing at this site. As such, a confirmation sample was obtained and retested at this site which shows compliance.

Based on the above description, we have prepared the following documents for your review and submission to the Westchester County Department of Health (WCDOH).

1. Sample Letter of Transmittal (to be transferred to Village letterhead and signed by the Village engineer)
2. Signed Lead and Copper Rule Monitoring Report
3. 90<sup>th</sup> Percentile Tables for Lead and Copper-2013
4. Lead and Copper Laboratory Test Results for 30 sampling sites
5. Confirmation Sample test results for [REDACTED]
6. Historic sample test results for [REDACTED]
7. Biweekly Water Quality Parameters (WQP) at the point of Entry

Should you have any questions, please do not hesitate to contact us.

Very truly yours,  
PROFESSIONAL CONSULTING, LLC.

  
Arshad Jalil, P.E., BCEE  
Project Manager

Enclosure

C: Howard Wessells, Superintendent DPW-Tarrytown NY  
Steve Cowles, Chief Operator-Shaft 10 PS- Tarrytown NY

F:\Home\documents\clients\Tarrytown\156-1- Lead & Copper\correspondance\2014.01.15-MM 2013 lead and copper transmittal.doc

**2013 LEAD AND COPPER RULE MONITORING REPORT**

System's Name: Village of Tarrytown Type: ☒ CWS ☐ NTNCWS  
Shaft #10 P.S.  
Dept. of Public Works

Address:



Size: \_\_\_\_\_ >100,000  
 \_\_\_\_\_ 50,001 to 100,000  
X 10,001 to 50,000  
 \_\_\_\_\_ 3,301 to 10,000  
 \_\_\_\_\_ 501 to 3,300  
 \_\_\_\_\_ 101 to 500  
 \_\_\_\_\_ ≤ 100

Telephone #: 914-631-0456  
 Fax #: 914-631-2258

Federal ID#: 00003461Contact Person: Steve Cowles, Chief Operator, Type IB

THE RESULTS OF LEAD AND COPPER TAP WATER SAMPLES MUST BE  
 ATTACHED TO THIS DOCUMENT

# of Samples required: 30 # of Samples submitted: 30

90<sup>th</sup> Percentile Level: Lead 16.1 ug/l Copper 295 ug/l

**TARGETING CRITERIA**

# of single family structures with copper pipes  
 and lead solder installed after 1982 or lead pipes  
 and/or lead service lines (Tier 1) 21

# of multi-family structures with copper pipes  
 with lead solder installed after 1982 or lead pipes  
 and/or lead service lines (Tier 1)  
 (Only applicable if multi-family structures comprise more  
 than 20% of the structures served by the water system) N/A

# of buildings containing copper pipes  
 with lead solder installed after 1982 or lead pipes  
 and/or lead service lines (Tier 2) N/A

# of sites that contain copper pipes and lead solder  
 installed before 1983 (Tier 3) 9

Total: 30

Exemption 6

Explanation of Tier 2 and/or Tier 3 sites are used  
(attach additional pages if necessary)

[REDACTED]

LEAD SERVICES LINE SITES

# of samples required to be drawn from lead service line sites N/A

# of samples actually drawn from lead service line sites N/A

Difference (explain differences other than zero)  
Method used to identify lead service line sites  
(attach additional pages if necessary)

All recourses were found through water applications records from the village

THE RESULTS OF WATER QUALITY PARAMETER (WQP) SAMPLES MUST BE  
ATTACHED TO THIS DOCUMENT

# of samples required to be collected N/A

# of WQP entry point samples required to be collected 2

# of WQP tap samples actually collected and submitted N/A

# of WQP entry point samples actually collected and submitted 2

Stephen L. Conley  
Signature

Chief Operator Type 1B  
Title

10/16/13  
Date

CERTIFICATION OF COLLECTION METHODS

I certify that:

- Each first draw tap sample for lead and copper is one liter in volume and has stood motionless in the plumbing system of each sampling site for at least six hours.
- Each first draw sample collected from a single-family residence has been collected from the cold water kitchen tap or bathroom sink tap.
- Each first draw sample collected from a non-residential building has been collected at an interior tap from which water is typically drawn for consumption.
- Each first draw sample collected during an annual or tri-annual monitoring period has been collected in the months of June, July, August or September.
- Each resident who volunteered to collect tap water samples from his/her home has been properly instructed by (insert water system's name) **Tarrytown Water Department** in the proper methods for collecting lead and copper samples. I do not challenge the accuracy of these sampling results. Enclosed is a copy of the material distributed to residents explaining the proper collection methods, and a list of the results. Sampling was performed by the owners of house/buildings used in the reports.

  
Signature

Stephen G. Cowles  
Name

WTP Chief Operator 1B  
Title

10/16/13  
Date

Exemption 6

**Village of Tarrytown  
Lead  
First Draw Sample Percentile Results 2013**

Sample #	Location	Sample Date	Lead (ug/L)
1		06/18/13	<LOQ
2		06/19/13	<LOQ
3		06/19/13	<LOQ
4		06/18/13	<LOQ
5		06/17/13	<LOQ
6		06/19/13	<LOQ
7		06/19/13	<LOQ
8		06/20/13	<LOQ
9		06/17/13	<LOQ
10		06/19/13	<LOQ
11		08/01/13	<LOQ
12		06/21/13	<LOQ
13		06/17/13	1.03
14		06/19/13	1.29
15		08/09/13	1.41
16		06/19/13	1.51
17		06/19/13	1.53
18		07/23/13	1.58
19		06/19/13	2.01
20		06/19/13	2.82
21		06/17/13	3.28
22		06/19/13	4.03
23		07/23/13	4.6
24		06/17/13	5.48
25		06/19/13	5.63
26		06/18/13	12.3
27		06/19/13	16.1
28		06/20/13	27.3
29		08/01/13	42.0
30		06/19/13	59.4
X 31			

24 ← 23 → 25, 22

**Regulatory Action Limits**

Lead 15 micrograms/Liter

16.1 micrograms/ Liter 90th Percentile

$$31 \text{ sample} \times 90\% \Rightarrow 27.94$$

$$\begin{aligned} 27^{\text{th}} \text{ sample } 12.3 \\ 28^{\text{th}} \text{ sample } 16.1 \end{aligned} \Rightarrow 16.1 - 12.3 = 3.8 \div 0.9 = 3.42$$

$$\Rightarrow 3.42 + 12.3 = 15.72$$

Exemption 6

**Village of Tarrytown  
Copper  
First Draw Sample Percentile Results 2013**

Sample #	Location	Sample Date	Copper (ug/L)
1		08/09/13	36.5
2		06/17/13	46.1
3		06/19/13	46.6
4		06/19/13	67.1
5		06/19/13	68.5
6		06/19/13	71.5
7		06/17/13	127.0
8		06/19/13	132.0
9		06/19/13	136.0
10		06/19/13	137.0
11		06/19/13	160.0
12		06/19/13	174.0
13		07/23/13	186.0
14		06/19/13	187.0
15		06/18/13	199.0
16		08/01/13	205.0
17		06/18/13	217.0
18		06/17/13	232.0
19		08/01/13	233.0
20		06/19/13	236.0
21		06/17/13	246.0
22		06/19/13	253.0
23		06/19/13	255.0
24		06/20/13	257.0
25		07/23/13	266.0
26		06/18/13	269.0
27		06/21/13	295.0
28		06/17/13	299.0
29		06/20/13	377.0
30		06/19/13	408.0
X 31			

**Regulatory Action Limits**

Copper 1300 micrograms/Liter

295 micrograms/ Liter

90th Percentile

$$[(295 - 246) * 0.9] + 246 = 293.1$$